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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/865,691	05/29/2001	Hiroshi Fukumoto	KIX0148-US	5176
28970	7590	03/23/2006	EXAMINER	
PILLSBURY WINTHROP SHAW PITTMAN LLP			SAFAIPOUR, HOUSHANG	
1650 TYSONS BOULEVARD			ART UNIT	
MCLEAN, VA 22102			PAPER NUMBER	
			2625	

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/865,691

Applicant(s)

FUKUMOTO ET AL.

Examiner

Houshang Safaipoor

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 May 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 3, 2006 has been entered.

### ***Response to Arguments***

Applicant's amendment filed on January 3, 2006 has been entered and made of record.

Examiner appreciates applicant's correction of the typographical error in the final office action that identified image reading region as (10) instead of (1A) as shown in fig. 3. However it should be noted here that there was no confusion in this regard, as suggested by the applicant, because the linear sensor was identified, correctly, as reference number 10 in the same office action. Furthermore applicant argues that "in Miyakawa the dark-time output regions 12, 13 of linear sensor 10 unavoidably detects trimming lines 31 and adversely affects black level adjustment, as clearly described from col. 1, line 52 to col. 2, line 9". This portion quoted by the applicant is from the "Background of the Invention" and is part of the problems that Miyakawa is eliminating by his invention (col. 2, lines 36-43). Miyakawa discloses that by providing two strips of black regions 22 and 23 on both sides of the original placement region 21, the light from the black regions 22 and 23 constantly enters regions 12 and 13 of the linear sensor 10 when the linear sensor is reading an original placed on the glass plate 20. As a result input light fluctuation

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is prevented and dark time level of dark time output regions 12 and 13 is stabilized (col. 3, lines 35-46). The image reading region of (1A) of the linear sensor (10) being wider than the original placement 32 (col. 1, lines 34-38) and by the configuration described above, regions 12 and 13 are outside of the reading region and over black regions 22 and 23.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyakawa (U.S. Patent No. 4,974,098) and further in view of Fujimoto (U.S. Patent No. 6,717,734).

Regarding claim 1, Miyakawa et al. discloses an image reading apparatus comprising:  
a transparent cover for providing a linear image that has a first length (fig. 4, plate 20 which is the same as plate 3 in fig. 2, col. 3, lines 24 and 25)

a light source (5, shown in fig. 2 but not in fig. 4) for generating light directed toward the linear image reading region (fig. 4, reference 21) on the transparent cover (20);

a plurality of light-receiving elements (10) that output image signals corresponding to received light (col. 3, line 46);

an array of lenses that focuses light onto the light-receiving elements (fig. 2). Miyakawa, does not show or define the length of the lens being greater than the length of the image reading region, however, Fujimoto discloses an image reading apparatus comprising a lens array (U2)

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and the lens holder (1) used in image reader (IR1). The length of the lens holder 1 is greater than the image reading S (figs. 11, 12 and 14 col. 9, lines 1-62). Therefore it would have been obvious to a person of ordinary skill in the art to combine Fujimoto's invention with that of Miyakawa in order to have the dark time output regions outside of the image reading region and as a result enhancing the image quality.

a light-shielding member (12 and 13);

wherein all of the light-receiving elements are arranged in a single line having an extremity, the light-shielding member covering at least one light-receiving element disposed at the extremity outside the first length (fig. 2, col. 1, lines 34-58 and col. 3, lines 35-52 and please refer to the response to the argument).

Regarding claim 2, Miakawa et al. discloses The apparatus according to claim 1, wherein remaining light-receiving elements (11) other than the covered light-receiving element or elements are exposed (fig. 2).

Regarding claim 3, Miakawa et al. does not explicitly disclose the apparatus according to claim 1, wherein the covered light-receiving element is arranged to avoid direct facing to an object to be read out (col. 1, line 34-58) and col. 3, lines 35-52).

Regarding claim 7, Miakawa et al. discloses The apparatus according to claim 1, further comprising a semiconductor chip in which the plurality of light-receiving elements are built in (col. 1, lines 5-18).

Regarding claim 8, Miakawa et al. discloses The apparatus according to claim 7, wherein the light-shielding member covers a part of the semiconductor chip in addition to said one light-receiving element disposed at the extremity (fig. 2).

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Regarding claim 9, Miakawa et al. discloses The apparatus according to claim 7, further comprising an additional semiconductor chip in which a plurality of identical light-receiving elements are built in, wherein all of the identical light-receiving elements are exposed (fig. 2).


Regarding claims 4-6 covering and shielding the light receiving elements with different materials and techniques are well known and routinely implemented in the art.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Houshang Safaipoor whose telephone number is (571)272-7412. The examiner can normally be reached on Mon.-Thurs. from 6:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571)272-7437. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 Houshang Safaipoor  
Patent Examiner  
Art Unit 2622  
March 13, 2006



DAVID MOORE  
SUPERVISORY PATENT EXAMINER  
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